

Amendments to the Specification

Please replace the paragraph beginning at page 30, line 1, with the following rewritten paragraph:

5

--The sheet heating unit 1 comprises a pair of heat rollers 2a, 2b and an endless belt [[3]] 3-1 which functions as a contact member.--

10

Please replace the paragraph beginning at page 30, line 3, with the following rewritten paragraph:

15

--The heat rollers 2a, 2b comprise built-in heaters, and are designed so that the temperature can be freely adjusted. The heat roller 2b is disposed so that it can rotate on the inner side of the endless belt [[3]] 3-1 while in contact with the inner surface of the endless belt [[3]] 3-1. The heat roller 2a is disposed on the outer side of the endless belt [[3]] 3-1, and comes in contact with the outer surface of the endless belt [[3]] 3-1 so that it can rotate in pressure contact with the heat roller 2b.--

20

Please replace the paragraph beginning at page 30, line 11, with the following rewritten paragraph:

25

--As shown in FIG. 1C, in the endless belt [[3]] 3-1, plural contact member corresponding parts having a size corresponding to the size of the sheet (New Year card size digital color photograph) 10 are connected to form the endless belt. The contact member corresponding parts comprise a part 3a whereof the whole surface is a gloss surface, a part 3b whereof the whole surface is a matt surface, and a part 3c whereof part is a gloss surface and part is a matt surface.--

30

Please replace the paragraph beginning at page 30, line 19, with the following rewritten paragraph:

--As shown in FIG. 1A, the endless belt 3-1 is suspended between the heat roller 2b, and a rotation roller 4 and suspension roller 5 disposed inside the endless belt 3-1.--

Please replace the paragraph beginning at page 30, line 22, with the following rewritten paragraph:

--According to this example, the sheet cooling unit 6 is a cooling apparatus fitted with an air blower, is installed inside the endless belt 3-1, and is disposed between the heat roller 2b and rotation roller 4.--

Please replace the paragraph beginning at page 31, line 1, with the following rewritten paragraph:

--When this surface treatment apparatus is driven, first, the sheet (New Year card size digital color photograph) 10 to be treated is transported from the eject tray in the image-forming apparatus to the interior of the surface treatment apparatus, and is conveyed along the transport direction A. The transport up to this point is performed by a transport roller or transport belt, and in Example 1, the design is such that this is performed by a transport belt. The control unit then adjusts the rotation speed of the endless belt 3-1 and the transport speed of the sheet (New Year card size digital color photograph) 10 based on a positioning sensor disposed slightly upstream of the nip part formed by the pair of heat rollers 2a, 2b and a positioning sensor disposed in the vicinity of the surface of the endless belt 3-1 and in the vicinity of the surface of the heat roller 2b, and performs positioning so that there is no positional offset between the contact member corresponding parts of the endless belt 3-1 and the sheet (New Year card size digital color photograph) 10. Next, the sheet (New Year card size digital color photograph) 10 enters the nip part formed between the pair of heat rollers 2a, 2b. The sheet (New Year card size digital color photograph) 10 inserted into the nip part rotates together with the pair of heat rollers 2a, 2b and is brought into contact with the surface of the endless belt 3-1. The rotation roller 4 and suspension roller 5 may rotate in synchronism with the rotation of the endless belt 3-1, or may be designed so that they are rotation

driven to rotate the endless belt [[3]] 3-1 together with the pair of heat rollers 2a, 2b. According to this example, the rotation roller 4 and suspension roller 5 have the former design.--

5 Please replace the paragraph beginning at page 32, line 3, with the following rewritten paragraph:

--At this time, as shown in FIG. 9, the heat rollers 2a, 2b are heated to a temperature at which the thermoplastic resin layer (in Example 1, this corresponds to the polyethylene
10 resin layer coating the surface of the New Year card size digital color photograph) of the sheet 10 can soften, so the sheet 10 inserted in the nip part is heated to a temperature at which the thermoplastic resin layer in the nip part softens and can deform. The thermoplastic resin layer in the nip part therefore softens, and becomes able to deform. At this time, pressure is applied to the nip part by the pressure force of the heat roller 2a,
15 so when the sheet 10 passes through the nip part while superimposed on a predetermined position of the endless belt [[3]] 3-1 under pressure, the thermoplastic resin layer which is in its softest state in the sheet 10 deforms while being pressed by the pair of heat roller 2a, 2b, and the surface qualities of the endless belt [[3]] 3-1 are transferred to the surface of the sheet 10. The sheet 10 then passes through the nip part while in intimate contact
20 with the surface of the endless belt [[3]] 3-1, and is transported along the transport direction A (FIG. 1A).--

 Please replace the paragraph beginning at page 32, line 21, with the following rewritten paragraph:

25 --Next, the sheet 10 is cooled by the cooling apparatus 6 while in intimate contact with the surface of the endless belt [[3]] 3-1, and the thermoplastic resin layer thereon solidifies. It is thereby transported up to the rotation roller 4. At the rotation roller 4, as transport direction A of the endless belt [[3]] 3-1 changes by 90° or more, the sheet 10 is
30 separated from the surface of the endless belt [[3]] 3-1 whereof the transport direction has

abruptly changed. The sheet 10 which is separated from the surface of the endless belt
 [[3]] 3-1 is then stored in a tray 12.--

5 Please replace the paragraph beginning at page 33, line 5, with the following
 rewritten paragraph:

10 The surface qualities of the endless belt [[3]] 3-1 are thereby transferred to the
 surface of the sheet 10 thus obtained. As shown in FIG. 1B, if a photographic image is
 formed on the whole surface, the whole surface is glossy like a mirror or matt, and if a
 character information surface or white background surface is present in one part, only the
 location where the photographic image is formed has a mirror-like glossy surface, and the
 character information surface or white background surface is a matt surface. The matt
 surface is easy to write upon.--

15 Please replace the paragraph beginning at page 33, line 15, with the following
 rewritten paragraph:

--The surface treatment unit in Example 1 is replaced by the surface treatment unit shown
 in FIG. 2A. This is identical to the surface treatment unit in Example 1, except that in
 20 this surface treatment unit, the sheet (New Year card size digital color photograph) 10 to
 be surface-treated is replaced by the sheet (New Year card having a digital color
 photographic image is one part, with character information printed underneath the
 photographic image) 10, and the endless belt [[3]] 3-1 is replaced by the endless belt [[3]]
3-2 wherein glossy surfaces 3c are disposed at a predetermined interval in a matt surface
 25 3d. The glossy surfaces 3c of the endless belt [[3]] 3-2 are positioned and superimposed
 on the photographic image part of the sheet (New Year card having a digital color
 photographic image in one part, with character information printed underneath the
 photographic image) 10.--

30 Please replace the paragraph beginning at page 34, line 4, with the following
 rewritten paragraph:

--The surface qualities of the endless belt [[3]] 3-2 are transferred to the surface of the sheet 10 obtained by surface treatment as in the case of Example 1. As shown in FIG. 2B, the photographic image part of the sheet (New Year card having a digital color photographic image in one part, with character information printed underneath the photographic image) 10 is a gloss surface, and the other part is a matt surface. The part with the matt surface is easy to write upon.--

Please replace the paragraph beginning at page 34, line 12, with the following rewritten paragraph:

--This is identical to Example 1, expect that in the surface treatment unit of Example 1, as shown in FIG. 3, the pair of heat rollers 2a, 2b are replaced by a pair of heat rollers 2c, 2d without using the endless belt which functions as the contact member, a thermal head 20 which can imagewise heat the image is disposed upstream of the pair of heat rollers 2c, 2d in the transport direction, and a preheating roller 22a comprising a pair of heat rollers is disposed upstream in the transport direction. A rotation roller 7 is further provided in the vicinity of the heat roller 2d and in contact with the outer side of an endless belt [[3]] 8 such that it can rotate. In Example 3, as shown in FIG. 7, in the thermal head 20, heating elements 20a are regularly arranged in rows vertically and horizontally, but as shown in FIG. 8, plural lines of the heating elements 20a arranged in rows may also be used.--

Please replace the paragraph beginning at page 36, line 4, with the following rewritten paragraph:

--This is identical to Example 3, expect that in the surface treatment unit of Example 3, as shown in FIG. 4, the thermal head 20 is replaced by the heat and pressure heater 26 without using the preheating roller 22a, the heat and pressure heater 26 being disposed between the pressure roller 2d and sheet cooling unit 6 on the outer side of the endless belt [[3]] 8, a positioning sensor 30 is provided between the heat and pressure heater 26

and pressure roller 2c, and rotation rollers 24a, 24b, 24c are provided between the thermal head 20 and rotation roller 4 on the outer side of the endless belt [[3]] 8.--

Please replace the paragraph beginning at page 37, line 7, with the following rewritten paragraph:

--This is identical to Example 1, expect that as shown in FIG. 5, in the surface treatment unit of Example 1, the contact member [[3]] 3-3 housed in a receptacle 15 is used superimposed on the undersurface of the sheet 10 without using the endless belt, and the contact member [[3]] 3-3 is released from the sheet 10 by a releasing member 32 after cooling treatment by the sheet cooling unit 6.--

Please replace the paragraph beginning at page 37, line 13, with the following rewritten paragraph:

--The contact member [[3]] 3-3 used in Example 5 is designed such that plural contact members respectively corresponding to each of the sheets 10 are joined together, and the sheets 10 can continuously be brought into contact one sheet at a time.--

Please replace the paragraph beginning at page 37, line 17, with the following rewritten paragraph:

--As shown in FIG. 5, a predetermined design is formed on the contact member [[3]] 3-3, this design part being formed of a heat conducting material, and the non-designed parts outside this design part are formed of a non-heat conducting material. Consequently, even if heat is applied to one surface of the contact member [[3]] 3-3, only the design part formed from a heat conducting material transmits heat to the other surface. In other words, the sheet 10 in contact with the contact member [[3]] 3-3 is heated to resemble the design formed on the contact member [[3]] 3-3. As a result, in the sheet 10 obtained, the design is transferred to this treatment surface, this design part has a glossy surface, and the non-design part has a matt surface.--

Please replace the paragraph beginning at page 38, line 3, with the following rewritten paragraph:

- 5 --In Example 5, in the contact member ~~[[3]]~~ 3-3, the design part is formed of a heat conducting material, and the non-design part is formed of a non-heat conducting material, but the design part may be formed of a non-conducting material and the non-design part formed from a heat conducting material. Also, the design part may be formed as a matt surface and the non-design part formed as a glossy surface, or alternatively, the design
10 part may be formed as a glossy surface and the non-design part formed as a mat surface.--

Please replace the paragraph beginning at page 38, line 11, with the following rewritten paragraph:

- 15 --In Example 5, the surface qualities of the contact member ~~[[3]]~~ 3-3 are transferred to the undersurface of the sheet 10 obtained by surface treatment, so that shop information or the like (3e) can be displayed.--

- 20 Please replace the paragraph beginning at page 45, line 2, with the following rewritten paragraph:

- The present invention aims to provide a surface treatment apparatus which can modify the surface qualities of different parts of image prints obtained by various image-forming methods, and an image-forming apparatus. For this purpose, it provides a surface
25 treatment apparatus ~~comprising~~ containing sheet heating unit which heats a sheet, a sheet cooling unit which cools the sheet in contact with a contact member, and a depression-and-protrusion shape control unit which forms depression-and-protrusion shapes by differently treating different parts of the surface of the sheet by at least one of the sheet heating unit and sheet cooling unit, and an image-forming apparatus ~~comprising~~
30 containing this surface treatment apparatus which can easily form images having different surface qualities in different parts.--